ABSTRACT OF THE DISCLOSURE

Method of identification and quantitative analysis of primary and/or secondary amine(s) in a sample by mass spectrometry using stable isotope labeled internal standard is provided. Said internal standard is prepared by reaction of an authentic sample of said amine with a stable isotope labeled reagent, and is added to a sample containing said amine. Said amine in said sample is then quantitatively converted to a chemical compound of identical structure, except the stable isotope atoms, as that of said internal standard using a non-labeled reagent. Said sample is then extracted and the extract is analyzed by mass spectrometry. Identification and quantification of said amine are made from a plot of ion ratio of said converted amine to said internal standard versus amine concentration.